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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,647	01/20/2004	Benedikt Sas	4532680/22350 (KEM 78)	1021

26386 7590 02/15/2007
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THE FINANCIAL CENTER
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SUITE 2500
DES MOINES, IA 50309-3993

EXAMINER

WARD, PAUL V

ART UNIT	PAPER NUMBER
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1624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/760,647	Applicant(s) SAS ET AL.	
	Examiner PAUL V. WARD	Art Unit 1624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 8-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. **STATUS:** The rejection of claims 1-4 and 8-10 under 35 U.S.C. 112, set forth in the Office action dated June 1, 2006 has been maintained for the reasons of record for the reasons set forth herein.

Response to Amendment Regarding

Claim Rejections - 35 USC § 112, first paragraph

2. The rejection, of claims 1-4 and 8-12 as failing to comply with the written description, has been overcome by Applicant's amendment in the reply filed September 9, 2006 requiring the X moiety in the ring to be O.

Claim Rejections - 35 USC § 112, second paragraph

3. The rejections, of claims 3, 4 and 12, have been overcome by Applicant's amendment in the reply filed September 9, 2006.

Response to Arguments Regarding

Claim Rejections - 35 USC § 112, first paragraph

4. Applicant's arguments filed September 9, 2006 have been fully considered but they are not persuasive.

Applicant contends that since vaccinia viruses are members of poxviridae, poxviridae is supported by the specification. However, Applicant's arguments are misplaced.

Applicant's claims are directed to the treatment of a family of viral infections. The claimed utility is an extraordinary one in that it is not limited to the viruses disclosed in

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the specification but rather asserts that administration of these compounds is effective against the full complex of these family or genus of viral infections.

Despite the colossal amount of research, since viruses were first identified as infective agents, no one has found an agent that is effective against all viruses. Under such circumstance, it is proper for the PTO to require evidence that such an unprecedented feat has actually been accomplished. *In re Ferens*, 163 USPQ 609. No such evidence has been presented in this case. The failure of skilled scientists to achieve a goal is substantial evidence that achieving such a goal is beyond the skill of practitioners in that art.

Additionally, an antiviral agent will be effective against a single species but not effective against other viruses in the same genus. It is known in the art that a few antiviral agents exist are effective against only a limited range of viruses. For example, Amantadine, an antiviral agent, has some effect on Influenza A, but is ineffective against Influenza B or C.

Thus, it is clear that the efficacy of antiviral agents against only a limited range of viruses is clear. The approaches to viral treatment that have been fruitful take advantage of precisely defined molecular features of the virus and have recently resulted in effective therapy for herpes and AIDS. The best targets for inhibition by antiviral are theoretically molecules serving a function unique to the virus. Viruses code for few enzymes that are vulnerable to chemical attack. Each virus tends to have its own set of enzyme systems. Viruses are classified on physical but not molecular features. IT is optimistic in the extreme to believe that given the history of anti-viral

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research that an agent will be effective on such a diverse class of viruses that share physical but not molecular features. The rejected claims call for the treatment of these broad family and subfamily or subgenus of viruses generally. Therefore, Applicant should limit claims to furonase compounds to treat herpesviridae viruses, which is supported by Applicant's specification.

Therefore, the rejection of claims 1-4 and 8-10 under 35 U.S.C. 112 set forth in the Office action dated June 1, 2006 and today has been maintained for the reasons of record and for the reasons set forth herein.

Conclusion

Claims 1-4 and 8-10 are pending. Claims 1-4 and 8-10 are rejected. No claims are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL V. WARD whose telephone number is 571-272-2909. The examiner can normally be reached on M-F 8 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



James O. Wilson
Supervisory Patent Examiner
Technology Center 1600